Receipt date: 10/14/2008 Doc code:IDS

Doc description: Information Disclosure Statement (IDS) Filed

09211297 - GAU: 1644 PTO/SB/08a (08-08)

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First Named Inventor Boyle, William J. Art Unit 1644

09211297

1998-12-14

Examiner Name Szperka, Michael E.

Application Number

Filing Date

Attorney Docket Number A-451M IDS#1-101408

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Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear		
/MS/	1	4710457		1987-12-01	Dupont et al.			
000000000000000000000000000000000000000	2	4710473		1987-12-01	Morris			
(00000000000000000000000000000000000000	3	4959314		1990-09-25	Mark et al.			
200000000000000000000000000000000000000	4	5118667		1992-06-02	Adams et al.			
900000000000000000000000000000000000000	5	5393739		1995-02-28	Bentz et al.			
000000000000000000000000000000000000000	6	5447851		1995-09-05	Beutler et al.			
000000000000000000000000000000000000000	7	5457035		1995-10-10	Baum et al.			
/MS/	8	5578569		1996-11-26	Tam			

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number		09211297	09211297 - GAU: 1644				
Filing Date		1998-12-14					
First Named Inventor	Boyle	, William J.					
Art Unit		1644					
Examiner Name	Szpei	ka, Michael	E.				
Attorney Docket Numb	er	A-451M	IDS#1-101408				

/MS/	9	5585479		1996-12-17	Hoke et al.	
egocociojososeispessasispussuocococionas	10	5599708		1997-02-04	Mundy et al.	
0500	11	5658756		1997-08-19	Rodan et al.	
000000000000000000000000000000000000000	12	5843901		1998-12-01	Roeske	
obsocossessessessessessessessessessessessesse	13	5985832		1999-11-16	Roodman et al.	
000000000000000000000000000000000000000	14	6015938		2000-01-18	Boyle et al.	
000000000000000000000000000000000000000	15	6087555		2000-07-11	Dunstan et al.	
оромновинацияннорогомного	16	6271349	B1	2001-08-07	Dougall et al.	
	17	6284485	B1	2001-09-04	Boyle et al.	
900900000000000000000000000000000000000	18	6284728	B1	2001-09-04	Boyle et al.	
/MS/	19	6284740	B1	2001-09-04	Boyle et al.	

Receipt date: 10/14/2008

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Art Unit	1644			
Examiner Name	ka, Michael	E.		
Attorney Docket Numb	A-451M	IDS#1-101408		

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/MS/	20	6288032	B1	2001-09-11	Boyle et al	
SS_00000000000000000000000000000000000	21	6316408	B1	2001-11-13	Boyle	
0,000,000,000,000,000,000,000,000,000,	22	6369027	B1	2002-04-09	Boyle et al.	
000000000000000000000000000000000000000	23	6528482	B1	2003-03-04	Anderson et al.	
00000000000000000000000000000000000000	24	6537763	B2	2003-03-25	Dougall et al.	
000000000000000000000000000000000000000	25	6562948	B2	2003-05-13	Anderson	
увогофильного подоставления	26	6569430	B1	2003-05-27	Waldmann et al.	
000000000000000000000000000000000000000	27	6649164	B2	2003-11-18	Maraskovsky	
000000000000000000000000000000000000000	28	7084257	B2	2006-08-01	Deshpande et al.	
000000000000000000000000000000000000000	29	7262274	B2	2007-08-28	Anderson et al.	
/MS/	30	7364736	B2	2008-04-29	Boyle et al.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)

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/MS/		1	20020081720	A1	2002-06-27	Dougall et al.			
000000000000000000000000000000000000000		2	20020086826	A1	2002-07-04	Anderson et al.			
000000000000000000000000000000000000000		3	20020086827	A1	2002-07-04	Anderson			
200000000000000000000000000000000000000		4	20020127637	A1	2002-09-12	Ni et al.			
000000000000000000000000000000000000000		5	20020150989	A1	2002-10-17	Greene et al.			
		6	20020169117	A1	2002-11-14	Maraskovsky			
***************************************		7	20030100069	A1	2003-05-29	Ni et al.			
		8	20030144480	A1	2003-07-31	Gorman et al.			
/M	S/	9	20030166097	A1	2003-09-04	Greene et al.			
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Art Unit 1644

Examiner Name Szperka, Michael E.

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			FORE	EIGN PAT	ENT DOCUM	IENTS	Remove	
Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² j	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T5
/MS/	1	743257	AU	B2	1998-11-11	Boyle		
000000000000000000000000000000000000000	2	713471	AU	B2	1998-07-17	Anderson et al.		
)0000000000000000000000000000000000000	3	735355	AU	B2	1998-11-11	Yamaguchi et al.		
***************************************	4	0514130	EP	A2	1992-11-19	Sato et al.		
227777777777777777777777777777777777777	5	0514130	EP	АЗ	1992-11-19	Sato et al.		
000000000000000000000000000000000000000	6	0526905	EP	A2	1993-02-10	Wallach et al.		
***************************************	7	0526905	EP	A3	1993-02-10	Wallach et al.		
	8	0727211	EP	A1	1996-08-21	Dunnington		
/MS/	9	330400	NZ		1999-05-28	Snow Brand Milk Products Co., Ltd.		

Receipt date: 10/14/2008	Application Number		09211297	09211297 - GAU: 1644
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STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Art Unit		1644	
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	Attorney Docket Numb		A-451W 1D	3#1-101400

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***************************************		19	0162932	WO	A1	2001-08-30	Deshpande et al.		
		18	0103719	wo	А3	2001-01-18	Boyle et al.		
		17	0103719	wo	A2	2001-01-18	Boyle et al.		
		16	9953942	wo	A1	1999-10-28	Simonet et al.		
200000000000000000000000000000000000000		15	9919468	wo	A1	1999-04-22	Simonet et al.		
200000000000000000000000000000000000000		14	9828246	wo	A1	1998-07-02	Hotier et al.		
		13	9700317	wo	A1	1997-01-03	Roodman et al.		
000000000000000000000000000000000000000		12	9628546	wo	A1	1996-09-19	Greene et al.		
***************************************		11	9511308	wo	A1	1995-04-27	Simonet et al.		
/MS	3/	10	9321946	wo	A1	1993-11-11	Thompson et al.		

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Receipt date: 10/14/2008	Application Number		09211297	09211297 - GAU: 1644
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INFORMATION DISCLOSURE	First Named Inventor	Boyle	, William J.	
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(Not for Submission under of Of K 1.99)	Examiner Name	Szper	ka, Michael E.	

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A-451M

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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T 5			
/MS/	1	Adams et al., "Complementary DNA Sequencing: Expresses Sequence Tags and Human Genome Project", Science, 252: 1651-1556 (1991)				
N9990000000000000000000000000000000000	2	Benjamini et al., Immunology: A Short Course, 2nd Edition, Wiley-Liss, New York, p. 40				
	3	Burgess, T. L. et al., "the ligand for osteoprotegerin (OPGL) directly activates mature osteoclasts", J. Cell Bio., 145: 527-538 (1999)				
05/000000000000000000000000000000000000	Chambers et al., "Generation of osteoclast-inductive and osteoclastogenic cell lines from the H-2KbtsA58 tramouse", Proc. Natl. Acad. Sci. USA, 90: 5578-5582 (1993)					
	5	Chambers, T. J., "Regulations of the differentiation and function of osteoclasts", J. Pathol., 192: 4-13 (2000)				
/MS/	6	Chenu et al., "Transforming growth factor beta inhibits formation of osteoclast-like cells in long-term human marrow cells", Proc. Natl. Acad. Sci. USA, 90: 5578-5582 (1993)				
10000000000000000000000000000000000000		INTENTIONALLY LEFT BLANK				
/MS/	8	Database GenBank Accession No. AB008426 1998				
5-1000000000000000000000000000000000000	9	Database GenBank Accession No. AF019047 1997				
/MS/	10	Database GenBank Accession No. AF013170 1998				

Receipt date: 10/14/2008	Application Number		09211297	09211297 - GAU: 1644	
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INFORMATION DISCLOSURE	First Named Inventor	Boyle	, William J.		
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(Not lot Submission under 07 of K 1.00)	Examiner Name	Szper	Szperka, Michael E.		

A-451M

IDS#1-101408

Attorney Docket Number

/MS/	11	Database GenBank Accession No. AF013171	
000000000000000000000000000000000000000	12	Database GenBank Accession No. AF019048 1997	
345000000000000000000000000000000000000	13	Fata, J. E. et al., "The osteoclast differentiation factor osteoprotegerin-ligand is essential for mammary gland development", Cell, 103: 41-50 (2000)	
300000000000000000000000000000000000000	14	Faust, J. et al., "Osteoclast markers accumulate on cells developing from human peripheral blood mononuclear precursors", J. Cell Biochem., 72: 67-80 (1999)	
000000000000000000000000000000000000000	15	Fawthrop et al., "The effect of transforming growth factor beta on the plasminogen activator activity of normal osteoblast-like cells and a human osteosarcoma cell line MG-63", J. of Bone and Mineral Research, 7(12): 1363-1371, (1992)	
00000000000000000000000000000000000000	16	Fenton et al., "Long-Term culture of disaggregated rat osteoclasts: inhibition of bone resorption and reduction of osteoclast-like cell number by calcitonin and PTHrP[107-139]", J. of Cellular Physiology, 155: 1-7 (1993)	
000000000000000000000000000000000000000	17	Fuller, K. et al., "TRANCE is necessary and sufficient for osteoblast-mediated activation of bone resorption in osteoclasts", J. Exp. Med., 188: 997-1001 (Sept. 7, 1998)	
000000000000000000000000000000000000000	18	Gao, Y. H. et al., "Potential role of cbfal, an essential transcriptional factor for osteoblast differentiation, in osteoclastogenesis: regulation of mRNA expression of osteoclast differentiation factor (ODF)", Biochem. Biophys. Res. Commun., 252: 697-702 (1998)	
000000000000000000000000000000000000000	19	George et al., "Current methods in sequence comparison and analysis", Macromolecular Sequencing and Synthesis Selected Methods and Applications, David H. Schlesinger (ed.), Alan R. Liss Inc. (Publisher), pgs. 127-149 (1988)	
000000000000000000000000000000000000000	20	Goodwin et al., "Molecular Cloning and Expression of the Type 1 and Type 2 Murine Receptors for Tumor Necrosis Factor", Molecular and Cellular Biology, 11(6): 3020-3026 (1991)	
/MS/	21	Gowen et al., "Preferential inhibition of cytokine-stimulated bone resorption by recombinant interferon gamma", J. of Bone and Mineral Research, 1(5): 469-474 (1986)	

Receipt date: 10/14/2008 09211297 - GAU: 1644 Application Number 09211297 Filing Date 1998-12-14 First Named Inventor Boyle, William J. 1644 Art Unit (Not for submission under 37 CFR 1.99) **Examiner Name** Szperka, Michael E.

Attorney Docket Number

A-451M

IDS#1-101408

INFORMATION	DISCLOSURE
STATEMENT B	Y APPLICANT

/MS/	22	Greenfield, E. M. et al., "Regulation of osteoclast activity", Life Sci. 65: 1087-1102 (1999)	
	23	Hattersley et al, "Hyman macrophage colony-stimulating factor inhibits bone resorption by osteoclasts disaggregated from rat bone", J. of Cellular Physiology, 137: 199-203 (1988)	
	24	Hsu, H. et al., "Tumor necrosis factor receptor family member RANK mediates osteoclast differentiation and activation induced by osteoprotegerin ligand", Proc. Natl. Acad. Sci. USA, 96: 3540-3545 (1999)	
***************************************	25	International Search Report, International Appl. No. PCT JP98/10728 (1998)	
VIII TO THE TOTAL PROPERTY OF THE TOTAL PROP	26	Itonaga, I. et al., "Rheumatoid arthritis synovial macrophage-osteoclast differentiation is osteoprotegerin ligand-dependent", J. Pathol., 192: 97-104 (2000)	
	27	Kaji et al., "Insulin-like growth factor-I medicates osteoclast-like cell formation stimulated by parathyroid hormone", J. of Cellular Physiology, 172: 55-62 (1997)	
000000000000000000000000000000000000000	28	Kasono et al., "Inhibitory effect of interleukin-4 on osteoclast-like cells formation in mouse bone marrow culture", Bone and Mineral, 21(3): 179-188 (1993)	
000000000000000000000000000000000000000	29	Kim, D. et al., "Regulation of peripheral lumph node genesis by the tumor necrosis factor family member TRANCE", J. Exp. Med., 192: 1467-1478 (2000)	
020-000-000000000000000000000000000000	30	Kim, Nacksung et al., "Diverse roles of the tumor necrosis factor family member TRANCE in skeletal physiology revealed by TRANCE deficiency and partial rescue by a lumphocyte-expresses TRANCE transgene", Proc. Natl. Acad. Sci. USA, 97: 10905-10910 (2000)	
0.0000000000000000000000000000000000000	31	Kinpara, K. et al., "Osteoclast differentiation factor in human osteosarcoma cell line", J. Immunoassay, 21:327-340 (2000)	
/MS/	32	Kitazawa, R. et al., "Promoter structure of mouse RANKL/TRANCE/ODF gene", Biochim. Biophys. Acta., 1445: 134-141 (1999)	

Receipt date: 10/14/2008			Application Number		₀₉₂₁₁₂₉₇ 09211297 - GAU: 1644			
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				Attorney Docket Numb	er	A-451M IDS#1-101	1408	
/MS/	33	Kong, Y. Y. et al., "Activated T cells regulate bone loss and joint destruction in adjuvant arthritis through osteoprotegerin ligand", Nature, 402: 304-309 (1999)						
000000000000000000000000000000000000000	34	Kong, Y. Y. and Penninger, J. M., "Molecular control of bone remodeling and osteoporosis", Exp. Gerontol., 35: 947 956 (2000) Kukita et al., "Osteoinductive factor inhibits formation of human osteoclast-like cells", Proc. Natl. Acad Sci USA., 87: 3023-3026 (1990)						
Ментерия (Серения и поставля (Серения и поста	35							
NASHARDANDANDANDANDANDANDANDANDANDANDANDANDAND	36	Lacey et al., " 435-448 (200		and modulates murine osteo	clast sı	urvival in vitro and in vivo	o", Am. J. Pathol., 157:	
/MS/	37	Lewis et al., "Cloning and expression of cDNAs for two distinct murine tumor necrosis factor receptors demonstrate one receptor in species specific", Proc. Natl. Acad. Sci. USA, 88: 2830-2834 (1991)						
If you wis	sh to a	dd additional	non-patent literatu	ure document citation info	matio	n please click the Add	button Add	
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